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(19) **United States**(12) **Patent Application Publication**
Snyder(10) **Pub. No.: US 2020/0156685 A1**(43) **Pub. Date: May 21, 2020**(54) **APPARATUS FOR
GYROSCOPICALLY-RESPONSIVE POWER
ASSISTED VEHICLE****B62M 6/50** (2006.01)**B62B 1/18** (2006.01)(52) **U.S. Cl.****CPC** **B62B 5/0073** (2013.01); **G05D 1/0891**(2013.01); **B62B 1/18** (2013.01); **B62B 5/0043**(2013.01); **B62M 6/50** (2013.01)(71) Applicant: **Secure Information Devices Inc.,**
Beaver, PA (US)(72) Inventor: **John B. Snyder**, Pittsburgh, PA (US)(21) Appl. No.: **16/749,778**(22) Filed: **Jan. 22, 2020****Related U.S. Application Data**(63) Continuation of application No. 16/126,606, filed on
Sep. 10, 2018, which is a continuation of application
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10,093,337.**Publication Classification**(51) **Int. Cl.****B62B 5/00** (2006.01)**G05D 1/08** (2006.01)

(57)

ABSTRACT

A gyroscopically-responsive power assisted moment arm is disclosed for use in connection with vehicles such as load carrying devices. A moment arm extends to a pivot point such that when a longitudinal force is applied at the moment arm, a sensor senses such force and outputs an energizing signal to a motor to drive a wheel. If a rotational or vertical force is applied to the moment arm, the motor need not be driven. According to the invention, therefore, a power assist can be provided to a user to drive a wheel in a desired direction of transport while not causing drive during tipping or unloading of the load carrying portion of the vehicle. Such an apparatus can be advantageously applied to a power assisted wheelbarrow, as one exemplary application.

